

### **REMARKS**

Applicants thank the Examiner for total consideration given the present application. Claims 1-31 are currently pending. Claims 1, 6, 8, 11, 16, 18, 19, 22, 24, 26, 27, and 30 are independent which have been amended through this Reply. Applicants respectfully request reconsideration of the rejected claims in light of the amendment and remarks presented herein, and earnestly seek timely allowance of all pending claims.

#### **35 U.S.C. § 102 REJECTION – Nakakita**

Claims 6-7, 18, and 22-23 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Nakakita et al. (JP 2002159053)[hereinafter "Nakakita"]. Applicants respectfully traverse this rejection for the following reasons.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. *See M.P.E.P. 2131; M.P.E.P. 706.02*. Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, Nakakita fails to teach or suggest each and every claimed element of independent claims 6, 18, and 22.

Independent claim 6 recites, *inter alia*, “a management communication terminal device for managing a network configuration in such a way that a participation terminal device can directly communicate with another participation terminal device without passing through the management communication terminal device, . . . a process of receiving communication availability judgment result, after receiving the sent participation terminal information, from a participation terminal device which sends the communication availability judgment result indicating whether or not direct communication can be performed with another participation terminal device that is participating in the network, another participation terminal device being other than the management communication terminal device, and a process of determining a participation terminal device that should be excluded from the network in accordance with the communication availability judgment result, and deleting the participation terminal device that

should be excluded from the network from the participation terminal information, thereby updating the participation terminal information.”

Independent claim 18 recites, *inter alia*, “a network configuration management method for managing a network configuration by a management terminal, . . . the communication terminals that are participating in the network can directly communicate with each other without passing through the management terminal and can acquire available transmission rates of each other; the network configuration management method comprising the steps of: . . . receiving a participation request being sent from a participation requesting terminal requesting to newly participate in the network, the participation request which contains communication availability information indicating whether direct communication with the communication terminals that is participating in the network can be performed or not and a result of available transmission rate judgment; . . . updating the participation terminal information in accordance with the participation permissibility judgment, if the participation requesting terminal can participate in the network; and sending the participation terminal information to the communication terminal that is participating in the network, if the participation terminal information is updated.”

Independent claim 22 recites, *inter alia*, “a network configuration management method for managing a network configuration by a management terminal, wherein the network includes a plurality of communication terminals each having a unique terminal identifier, one of the plurality of communication terminals is the management terminal, and the communication terminals that are participating in the network can directly communicate with each other without passing through the management terminal and can acquire available transmission rates of each other; the network configuration management method comprising the steps of: . . . determining whether the communication terminal can participate in the network or not in accordance with the received transmission rate information, and deleting terminal information of a communication terminal being determined not to be able to participate in from the participation terminal information, thereby excluding the communication terminal from the network.”

It is respectfully submitted that Nakakita fails to teach or suggest the above-identified claim features of claims 6, 18, and 22.

The independent claims 6, 18, and 22 are amended so as to include the feature such as "a participation terminal (device) can directly communicate with another participation terminal (device) without passing through a management terminal (device)". The new limitation "without passing through a management terminal (device)" is added to these claims in order to clarify and emphasize the meaning of "directly communicate" or "direct communication". That is to say, in these independent claims, the communication data can be transmitted directly between a participation terminal (device) and another participation terminal (device), not via a management terminal (device).

In the Advisory Action the Examiner states that Nakakita discloses a method wherein a requesting terminal, read as the Claimed participation terminal, attempts to register with a base station and communicate with other terminals of different manufacture, interpreted to read as the Claimed management of network configuration for direct communication. (*See page 2 of the Advisory Action.*)

It is respectfully submitted that the Examiner's such statement is totally erroneous.

Contrary to the claimed invention, in Nakakita, the communication can be performed only between the base station (e.g., shown as A or B or X in FIGS. 1 and 30 of Nakakita) and other terminals (e.g., shown as 1, 2, 3, or 4 in FIGS. 1 and 30 of Nakakita). This is clearly indicated by bidirectional arrows in FIGS. 1 and 30 of Nakakita, for example. Therefore, in Nakakita, the communication data are transmitted indirectly between one terminal and another terminal via a base station.

In amended independent claims 6, 18, and 22 of the present application, "a participation terminal (device) can directly communicate with another participation terminal (device) without passing through a management terminal (device)", namely, the communication data can be transmitted directly between a participation terminal (device) and another participation terminal (device), not via a management terminal (device). This is clearly described by bidirectional arrows in FIG. 1 of the present application, for example.

Therefore, in amended independent claims 6, 18, and 22 of the present application, although the participation terminal information is transmitted between the management terminal

and the participation terminal, the communication data can be transmitted directly between a participation terminal and another participation terminal, not via a management terminal.

Further, Applicants again present herein the previously filed arguments as follows.

In response to Applicants' previously filed arguments, the Examiner now states, "Nakita et al. discloses a base station terminal, read as the Claimed management terminal device, outdoor terminals 2 and 4 which require demand registration from said base station terminal, read as the Claimed participation terminal device that should be excluded from the network in accordance with the communication availability and judgment result . . ." (see the paragraph bridging pages 31 and 32 of the final Office Action).

It is respectfully submitted that the Examiner's interpretation of the base station terminal (A or B) and outdoor terminals (1, 2, 3, 4) is totally erroneous.

Even if, *assuming arguendo*, the transceiver station (base station terminal) A or B is considered the claimed "management terminal device", this transceiver station (A or B) ***is not*** one of the terminals 1, 2, 3, or 4. Conversely, the claimed invention requires that the management terminal device ***is one of the communication terminal devices*** that can ***directly*** communicate with each other. In this instance, although the transceiver station A may directly communicate with either one of terminals 1 and 3, or the transceiver station B may directly communicate with either one of terminals 2 and 4, Nakakita fails to teach or suggest any direct communication between terminals 1 and 2; or 1 and 3; or 1 and 4; or 2 and 3; or 2 and 4; or 3 and 4; or A and B. Thus, the Examiner's allegation that the management terminal device is one of the communication terminal devices that can directly communicate with each other is totally unfounded and illogical.

As previously submitted, Nakakita is directed to a conventional domestic radio communication system with which wireless LAN (Local Area Network) is used in which a radio terminal can perform certain registration and attestation in the domestic radio communication system. For example, as illustrated in Fig. 1, Nakakita discloses a base transceiver station A installed in house A wherein terminals 1 and 3 belonging to house A and a base transceiver station B installed in house B wherein terminal 4 belonging to house B, and an outdoor terminal 2 belonging to an outdoor transceiver (not shown). Nakakita further discloses that the base

station A only manages registration and attestation of a terminals 1 and 3 belonging to house A, whereas the base station B only manages registration and attestation of a terminal 4 belonging to house B. (*See paragraph [0015].*) Nakakita does not teach or suggest that base station A manages registration and attestation of terminals 2 and 4. Thus, Nakakita cannot teach or suggest a process of determining a participation terminal device that should be excluded from the network in accordance with the communication availability judgment result, and deleting the participation terminal device that should be excluded from the network from the participation terminal information, thereby updating the participation terminal information as recited in claims 6, 18, and 22. As clearly disclosed by Nakakita, even if the base station A has registration and an authentication demand from the terminals 2 and 4, the base station A does not need to give attestation to the terminals 2 and 4. Thus, there is no requirement for updating the participation terminal information.

In addition, as previously submitted, if, *assuming arguendo*, one of the terminals 1, 2, 3, or 4 is considered the claimed “management terminal device”, no where does Nakakita teach or suggest that this management terminal device (e.g., terminal 1) determines whether other terminal device (one of terminals 2, 3, or 4) should be excluded from the LAN in accordance with the communication availability judgment result. Further, no where does Nakakita teach or suggest that this management terminal device (e.g., terminal 1) deletes the participation terminal device (one of terminals 2, 3, or 4) from the LAN from a participation terminal information, thereby updating the participation terminal information stored in the terminal 1.

Further, the Examiner’s totally ignored Applicants’ previous argument that no where does Nakakita teach or suggest that the transceiver station A or B includes a function of managing the configuration of the LAN as recited in claims 6, 18, and 22. Thus, if this rejection is maintained, it is respectfully requested to show where in Nakakita is there a teaching that transceiver station A or B includes a function of managing the configuration of the LAN. The MAC address as taught in Nakakita does not manage the configuration of a LAN. The MAC address simply suggests a location within the LAN.

Yet further, the Examiner totally ignored Applicants’ other arguments with respect to claims 18 and 22. As previously submitted, nowhere does Nakakita teach or suggest the claimed

“transmission rate information” as identified in claims 18 and 22. In paragraph [0055], Nakakita discloses as follows: “Since this 2nd example is clear in correlation with an authentication notification and the *change rate to the authentication mode of a terminal* compared with the 1st above-mentioned example, its point that the registration and attestation which the terminal which is not a request mistook can be prevented is advantageous.” However, this “change rate” is not the “transmission rate information” as recited in the above-identified claims. If this rejection is maintained, a proper response directed to the above-identified argument is respectfully requested.

Therefore, for at least the above reasons it is respectfully submitted that independent claims 6, 18, and 22 are allowable over Nakakita. Claims 7 and 23 are at least allowable by virtue of their dependency on corresponding independent claim.

35 U.S.C. § 103 REJECTION – Nakakita, Everdell, Takeuchi

A. Claims 1-2, 4-5, 8, 10-11, 16, 19, 24, 26-27, and 30 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakakita in view of Everdell et al. (U.S. Patent Publication No. 2002/0165961 A1)[hereinafter “Everdell”]. This rejection is respectfully traversed.

Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Additionally, there must be a reason why one of ordinary skill in the art would modify the reference or combine reference teachings to obtain the invention. A patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. *KSR Int'l Co. v Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007). There must be a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. *Id.* The Supreme Court of the United States has recently held that the “teaching, suggestion, motivation test” is a valid test for obviousness, albeit one which cannot be

too rigidly applied. *Id.* Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *Id.*

In this instance, Nakakita fails to teach or suggest each and every claimed element of independent claims 1, 8, 11, 16, 19, 24, 26, 27, and 30.

First, it is respectfully submitted that the independent claims 1, 8, 11, 16, 19, 24, 26, 27, and 30 are amended so as to include the feature such as "a participation terminal (device) can directly communicate with another participation terminal (device) without passing through a management terminal (device)". The new limitation "without passing through a management terminal (device)" is added to these claims in order to clarify and emphasize the meaning of "directly communicate" or "direct communication". That is to say, in these independent claims, the communication data can be transmitted directly between a participation terminal (device) and another participation terminal (device), not via a management terminal (device).

In the Advisory Action the Examiner states that Nakakita discloses a method wherein a requesting terminal, read as the Claimed participation terminal, attempts to register with a base station and communicate with other terminals of different manufacture, interpreted to read as the Claimed management of network configuration for direct communication. (*See page 2 of the Advisory Action.*)

It is respectfully submitted that the Examiner's such statement is totally erroneous.

Contrary to the claimed invention, in Nakakita, the communication can be performed only between the base station (e.g., shown as A or B or X in FIGS. 1 and 30 of Nakakita) and other terminals (e.g., shown as 1, 2, 3, or 4 in FIGS. 1 and 30 of Nakakita). This is clearly indicated by bidirectional arrows in FIGs. 1 and 30 of Nakakita, for example. Therefore, in Nakakita, the communication data are transmitted indirectly between one terminal and another terminal via a base station.

In amended independent claims 1, 8, 11, 16, 19, 24, 26, 27, and 30 of the present application, "a participation terminal (device) can directly communicate with another participation terminal (device) without passing through a management terminal (device)",

namely, the communication data can be transmitted directly between a participation terminal (device) and another participation terminal (device), not via a management terminal (device). This is clearly described by bidirectional arrows in FIG. 1 of the present application, for example.

Therefore, in amended independent claims 1, 8, 11, 16, 19, 24, 26, 27, and 30 of the present application, although the participation terminal information is transmitted between the management terminal and the participation terminal, the communication data can be transmitted directly between a participation terminal and another participation terminal, not via a management terminal.

Further, Applicants again present herein the previously filed arguments as follows.

For example, independent claim 1 recites, *inter alia*, “determining by the management terminal device, a participation terminal device that should be excluded from the network in accordance with the communication availability judgment result, and deleting by the management terminal device, the participation terminal device that should be excluded from the network from the participation terminal information, thereby updating the participation terminal information stored in the management terminal device.” *Emphasis added.*

Independent claim 8 recites, *inter alia*, “a communication terminal device other than a management terminal device, wherein the management terminal device includes a function of managing the configuration of a network, . . . a process of judging whether direct communication with another participation terminal device that is participating in the network . . . can be performed or not; and a process of sending the communication availability judgment result obtained by the process of judging to the management terminal device.”

Independent claim 11 recites, *inter alia*, “a network band management method used in a network that comprises a plurality of communication terminals including a single management terminal and a plurality of managed terminals, wherein the single management terminal includes a function of managing a configuration of the network, the plurality of the communication terminals in the network directly communicating with each other without passing through the management terminal; the network band management method comprising the steps of: giving notice of sending information . . . generating by the management terminal,



band-in-use information regarding a band being used in the network in accordance with the notified sending information; and giving notice of the generated band-in-use information from the management terminal to the plurality of the managed terminals.”

Independent claim 16 recites, *inter alia*, “receiving participation terminal information of the communication terminal that is participating in the network, the participation terminal information being sent from the management terminal at regular intervals, wherein the management terminal includes a function of managing a configuration of the network; judging communication availability judgment indicating whether direct communication with the communication terminals that are participating in the network without passing through the management terminal can be performed and available transmission rates in accordance with the participation terminal information; sending a participation request which contains a result of the transmission rate judgment to the management terminal . . . determining network participation permissibility in accordance with the received participation permissibility judgment result.”

Independent claim 19 recites, *inter alia*, “a network configuration management method for managing a network configuration, wherein the network includes a plurality of communication terminals each having a unique terminal identifier, one of the plurality of communication terminals is the management terminal that includes a function of managing the configuration of the network, and the communication terminals that are participating in the network can directly communicate with each other without passing through the management terminal and can acquire available transmission rates of each other; the network configuration management method comprising the steps of: . . . excluding by the certain communication terminal other than the management terminal, the certain communication terminal from the network in accordance with a notice of exclusion being sent from the management terminal, if the certain communication terminal cannot communicate with the other communication terminals that are participating in the network at a predetermined transmission rate or more, as a result of the transmission rate judgment.”

Independent claim 24 recites, *inter alia*, “a communication terminal device requesting to participate in a network, wherein the network includes a plurality of communication terminals each having a unique terminal identifier, one of the plurality of communication terminals is a

management terminal that includes a function of managing a configuration of the network, and the communication terminals that are participating in the network can directly communicate with each other without passing through the management terminal and can acquire available transmission rates of each other; the communication terminal device comprising: . . . a transmission rate judging means for judging communication availability indicating whether or not direct communication with the communication terminal that is participating in the network can be performed and available transmission rates in accordance with the participation terminal information; . . .”

Independent claim 26 recites, *inter alia*, “a communication terminal device as a management terminal which is one of a plurality of communication terminals forming a network, wherein the network includes the plurality of communication terminals each having a unique terminal identifier, one of the plurality of communication terminals is the management terminal that includes a function of managing a configuration of the network, and the communication terminals that are participating in the network can directly communicate with each other without passing through the management terminal and can acquire available transmission rates of each other; the communication terminal device comprising: . . . a participation request receiving means for receiving communication availability information indicating whether direct communication with the communication terminal that is participating in the network can be performed or not and a participation request which contains an available transmission rate judgment result, being sent from a participation requesting terminal which offers to newly participate in the network . . . .”

Independent claim 27 recites, *inter alia*, “a communication terminal device other than a management terminal, which is one of a plurality of communication terminals forming a network, wherein the network includes the plurality of communication terminals each having a unique terminal identifier, one of the plurality of communication terminals is the management terminal that includes a function of managing a configuration of the network, and the communication terminals that are participating in the network can directly communicate with each other without passing through the management terminal and can acquire available transmission rates of each other; the own communication terminal device comprising: . . . a transmission rate judging means for judging communication availability judgment indicating

whether direct communication with the communication terminals that are participating in the network can be performed or not and available transmission rates for communication, in accordance with the participation terminal information; . . . an excluding means for excluding the own communication terminal device from the network in accordance with a notice of exclusion which is sent from the management terminal, as a result of the transmission rate judgment, when the communication terminal device fails to communicate with the communication terminal that is participating in the network at a predetermined transmission rate or more.”

Independent claim 30 recites, *inter alia*, “a communication terminal device as a management terminal which is one of a plurality of communication terminals forming a network, wherein the network includes the plurality of communication terminals each having a unique terminal identifier, one of the plurality of communication terminals is the management terminal that includes a function of managing a configuration of the network, and the communication terminals that are participating in the network can directly communicate with each other without passing through the management terminal and can acquire available transmission rates of each other; the communication terminal device comprising: . . . a transmission rate judgment information receiving means for receiving a confirmation result of available transmission rates for direct communication between the communication terminal that is participating in the network and each of the communication terminals . . . .”

In response to Applicants’ previously filed arguments the Examiner simply states, “Applicant’s arguments filed 23 November 2009 with respect to claims 1, 8, 11, 16, 19, 24, 26-27 and 30 have been considered but are moot in view of the new ground(s) of rejection.” (*See page 31, section 10 of the final Office Action.*)

However, upon careful review of the final Office Action, Applicants find that the new ground(s) of rejection is made simply by importing Everdell to fulfill the deficiency of Nakakita with respect to the feature that the management terminal includes a function of managing a configuration of the network. (*See page 10, lines 1-11 of the final Office Action.*) The Examiner totally failed to respond to Applicants’ arguments directed to other features of the rejected independent claims.

As discussed above in great detail with respect to claims 6, 18, and 22, the Examiner's allegation that the management terminal device (transceiver A or B) of Nakakita is one of the communication terminal devices that can directly communicate with each other is totally unfounded and illogical.

Further, even if, *assuming arguendo*, there is sufficient motivation to combine Everdell with Nakakita (which Applicants do not admit), the combined invention would not provide a management terminal device that is one of the communication terminal devices that *can directly communicate with each other* and that *includes a function of managing a configuration of the network*.

As identified by the Examiner, Everdell merely discloses that within a telecommunication network, element management systems (EMSs) are designed to configure and manage a particular type of *network device* (e.g., switch, router, hybrid switch-router), and network management systems (NMSs) are used to configure and manage multiple heterogeneous and/or homogeneous *network devices*. Thus, it is clear that Everdell's EMSs and NMSs simply configure and manage a particular *device, not network*. (*Emphasis added.*) In other words, the EMSs or the NMSs of Everdell *would not* manage a configuration of the LAN of Nakakita if both of these references are combined as suggested by the Examiner.

Indeed, the Examiner now alleges that Nakakita teaches MAC addresses, thus, Nakakita discloses the feature of "managing a configuration a LAN". (*See page 3, last two paragraphs of the Advisory Action.*) As mentioned earlier, The MAC address as taught in Nakakita does not manage the configuration of a LAN. The MAC address simply suggests a location within the LAN.

Thus, independent claims 1, 8, 11, 16, 19, 22, 24, 26, 27, and 30 are distinguishable from Nakakita and Everdell at least for the above-identified reasons and further in view of other features recited therein.

For example, in regard to claim 11, nowhere does Nakakita teach or suggest, among other features, "generating by the management terminal, *band-in-use information regarding a band being used in the network in accordance with the notified sending information*; and giving notice of the generated band-in-use information from the management terminal to the

plurality of the managed terminals.” The Examiner cites paragraphs 0015-0016 and 0049 as disclosing the above-identified feature. However, upon careful review Applicants find no teaching or suggestion of the above-noted feature. Applicants request the Examiner to point out specifically which elements/features of Nakakita correspond to the above-identified claim feature. Indeed, the Examiner totally ignored Applicants’ argument with respect to this feature. Thus, if this rejection is maintained, a proper response directed to the above-identified argument is respectfully requested.

Similarly, nowhere does Nakakita teach or suggest the claimed “transmission rate information” as identified in claims 16, 19, 24, 26, 27, and 30 above. In paragraph [0055], Nakakita discloses as follows: “Since this 2nd example is clear in correlation with an authentication notification and the change rate to the authentication mode of a terminal compared with the 1st above-mentioned example, its point that the registration and attestation which the terminal which is not a request mistook can be prevented is advantageous.” However, this “change rate” is not the “transmission rate information” as recited in the above-identified claims. Again, the Examiner totally ignored Applicants’ argument with respect to this feature. Thus, if this rejection is maintained, a proper response directed to the above-identified argument is respectfully requested.

Therefore, for at least the above reasons, it is respectfully submitted that Nakakita in view of Everdell fails to render obvious independent claims 1, 8, 11, 16, 19, 24, 26, 27, and 30 and corresponding dependent claims.

Accordingly, Applicants respectfully request the withdrawal of the rejection of claims 1-2, 4-8, 10-11, and 16-31.

B. Claims 3, 9, and 12-15 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakakita in view of Everdell and further in view of Takeuchi et al. (JP 02002111728 A)[hereinafter “Takeuchi”]. Applicants respectfully traverse this rejection. Claims 3 depend from claim 1, claim 9 depends from claim 8, and claims 12-15 depend from claim 11. As demonstrated above, the combined invention of Nakakita and Everdell fails to teach or suggest the above-identified features of claims 1, 8, and 11. Takeuchi has not been, and indeed cannot be relied upon to fulfill the above-noted deficiency of Nakakita.

Therefore, Applicants respectfully request the withdrawal of the rejection of claims 3, 9, 12-15 for at least the same basis asserted above with regards to independent claims 1, 8, and 11 and further in view of novel features recited therein.

### CONCLUSION

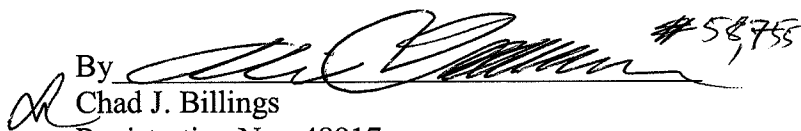
All rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claims does not necessarily signify concession of unpatentability of the claim prior to its amendment.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Ali M. Imam Reg. No. 58,755 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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